DOCUMENT RESUME

ED 182 283 SP 015 471

TITLE The Name of the Game: Trying Out the Findings. Beginning Teacher Evaluation Study. Newsletter #5.
INSTITUTION California State Commission for Teacher Preparation and Licensing, Sacramento.
PUB DATE Nov 79
NOTE 15p.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Beginning Teachers; *Educational Research; Research Needs; *Research Utilization; *Teacher Evaluation

ABSTRACT

The Beginning Teacher Evaluation Study (BTES) newsletter presents news and an overview of the BTES project. Major articles recount the story of what happens when public school teachers and principals implement the BTES into their individual schools. (LH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED182283

NEWSLETTER #5

Beginning Teacher Evaluation Study

THE NAME OF THE GAME: Trying Out the Findings

1979-80

Commission for Teacher Preparation and Licensing NOVEMBER 1979

Overview for 1979-80

We are reserving this space in order to reach out to our friends and colleagues who have been interested in and have followed the Beginning Teacher Evaluation Study. Within this issue of the Newsletter, the first for 1979-80, we will include the following information:

1. The names and location of the Mini-grant recipients.
2. A calendar of BTES events for the year.
3. Several articles by practitioners about BTES.
4. A reiteration of the goals of the BTES.

As you know, this is the "final year" for the BTES project, as far as Federal Funding is concerned. Begun in 1972, and funded in the approximate amount of $3.5 million, the BTES, it is hoped, has laid a solid foundation for the immediate application, experimentation, and research about the teaching-learning function as related to the outcomes of this major educational project. The emphasis during 1979-80 will be to digest and to *try out* the findings which have emerged from the BTES research. The awarding of the Mini-grants *(see adjoining column)* is a step in that direction. The Commission and the National Institute of Education, which funded the project, sincerely hope that the content of the BTES research will be learned about and tried out on an ever-widening scale in the next several years. The Commission and its staff are eager to assist anyone who is interested in obtaining additional information and assistance.

SP 015 471

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Sidney A. Inglis

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Mini-Grants

AWARDS

Peter L. LoPresti, Executive Secretary for the Commission, was delighted to notify in September the following persons and/or agencies who were awarded BTES Mini-grants[1].

1. Tehama County Dept. of Education, Marvin Locke.
2. Oakland Unified School District, Redwood Heights Elem. School, Marilyn Bradshaw.
3. San Jose Unified School District, John N. Davis.
4. California State University, Fresno, Richard Brown.
5. University of California, Los Angeles, Noreen Webb.
6. Newport-Mesa Unified School District, Mary L. Kruse.
7. Santa Barbara County Schools, Sidney R. Ottman.
8. Ventura County Superintendent of Schools, Ricky Mikkelsen.
9. Lowell Joint Unified School District, Gail Wickstrom.
10. Los Angeles School District, Pacoima Elem., Beverly Weber and Lucette Senesac.
11. Brea-Olinda School District, Orange County, Les Bishop.
12. Huntington Beach Unified School Dist., Richard Altimari.
13. San Juan Unified School District, Marilyn T. Casstevens.
14. San Juan Unified School District, Targe Lindsey.
15. San Juan Unified School District, Bob Meyers.
16. San Juan Unified School District, Joyce Howard.

PROCESS

The review of all Mini-grant applications was conducted immediately after the deadline for such submission. The Commission received 68 proposals in

[1]A summary, containing a brief and specific synopsis for each, has been prepared by Commission staff and is available upon request.

response to the Mini-grant competition announcement. Three of these were from out-of-state. Of the 68 proposals, 11 were from institutions of higher education while 57 came from individual teachers, school districts, county offices and school resource centers. A two-day meeting was held on August 9, 10, 1979 by the Research Utilization Board to review these proposals. The Board was joined by a staff member each from the Far West Laboratory, State Department of Education and California Teacher Corps Network, all of whom served as part of the review team.

The reviewers worked in two five-person teams. At first the two teams reviewed several proposals in common to assure inter-rater reliability. The 68 proposals were divided into two groups and were reviewed thoroughly by each member of the team. Each proposal was scored on the basis of the degree to which it was responsive to the criteria stated in the Mini-grant guidelines. All scores for each proposal were averaged by staff, given back to the reviewers, then used by each team for discussion and ranking of each proposal. All 68 proposals were scored and ranked in this manner. A report by the review team indicated the scores and ranking of the proposals and also included the recommendations and concerns of the Research Utilization Board. On August 20, 1979, the Planning and Research Committee of the Commission selected sixteen proposals for funding. This decision was later ratified by the full commission.

BTES 1979-80 Schedule of Events

"NETWORK" MEETINGS

One of the most important of the Commission's goals for the 1979-80 year is to establish a cohesive means for all persons working directly with or actively interested in the result of the BTES to learn first-hand about each other and the various projects surrounding the BTES findings which are in progress. In order to do this a "network" concept has been established by which BTES information can be freely exchanged and discussed. The following dates for Network meetings have been set:

1. November 14, 1979, Los Angeles, Hacienda Hotel 8:30 a.m.-4:00 p.m. For: All parties involved in the BTES dissemination and implementation phase.
2. A. February 13, 1980, San Francisco Bay Area. For: Northern California grant recipients, CTPL staff and others.
   B. February 20, 1980, Los Angeles/Orange County. For: Southern California grant recipients, CTPL staff and other.
3. May 21, 1980, Sacramento. For: All parties involved in the BTES dissemination and implementation phase.

NEWSLETTERS

1. The regular BTES Newsletter, of which this is the first for 1979-80, will be issued four times during the year to all persons on the mailing list and/or desiring to receive a copy.
2. A special "Grantee Newsletter", a brief and informal letter, will be sent periodically to Mini-grant recipients in an effort to "stay in touch".

RESEARCH UTILIZATION BOARD

Five meetings will be held by the Research Utilization Board, a body composed of teacher educators and researchers, during the year as it continues to advise and assist the Commission in developing meaningful uses and directions for the BTES.

BIBLIOGRAPHY

A bibliography has been compiled by the Commission which lists numerous technical reports and research information revolving around the teaching/learning complex focused upon by the BTES. It is available upon request from the Commission staff.

TRYING OUT THE FINDINGS: THE VIEWS OF SEVERAL PRACTITIONERS

Included in this issue of the Newsletter are two articles written by educational practitioners who have served as advisors for some time to the BTES project and are "trying out" some of the research findings. (We would welcome hearing from others who are also working with the BTES evidence.) In "A Teacher Implements BTES" a sixth grade teacher tells her story of seting up a classroom using the BTES model. In "A Principal Implements BTES" a working principal talks about her efforts to use the BTES model with her staff. Various issues are raised, problems discussed and possibilities described.

Commission Staff

The following members of the staff are working with the BTES, and are eager to be of assistance.

Alan Jones, Chief, Planning and Research
Marjorie Brodt, Consultant
Sid Inglis, Manager, BTES
Eunice Swanson, Secretary
Telephone: 916/322-3458

ARE YOU BTES-ACTIVE?

We of the BTES staff ever more frequently and unexpectedly bump into someone who is working with — "trying out" — the BTES findings, most often an activity of which we were unaware. We would like to know if you are "BTES-active" so that we can learn from you and we can let others know what you are doing. Please let Sid Inglis, BTES Manager, know if you have something to share.

IN CASE YOU'RE INTERESTED:

A number of insightful and penetrating articles about the BTES were developed by noted educators specifically for the Commission, and were published in the four BTES Newsletters issued during the 1978-79 academic year. In case you missed them or would like to refer back, the titles are as follows:

1. "Time and School Learning," Walter R. Borg, Utah State University (March, 1979).
2. "How Time is Spent in Elementary Classrooms," Barak V. Rosenshine, University of Illinois (March, 1979)
3. "BTES: Implications for Pre-Service Education of Teachers," Karen B. Kepler, Teachers College, Columbus University (March, 1979)
4. "BTES: Implications for Staff Development," Lynne Miller, University of Massachusetts (March, 1979)
5. "Salient Features of the BTES Framework," Thomas A. Romberg, University of Wisconsin (May, 1979)
6. "Success Rate," James W. Block, University of California, Santa Barbara (May, 1979)
7. "Teacher Function Checklist," Nikola Filby, Far West Laboratory (May, 1979)
8. "Implementing the Beginning Teacher Evaluation in Elementary Schools: Implications for the Principal," Richard C. Williams, University of Los Angeles, Los Angeles (June, 1979)
9. "A Perspective in Curriculum and The Beginning Teacher Evaluation Study (BTES)," M. Frances Klein, Pepperdine University (June, 1979)
10. "On Learning to Teach Effectively from Research on Teacher Effectiveness," Gary D. Fendermacher, Virginia Polytechnic Institute (June, 1979)

A TEACHER IMPLEMENTS BTES

Raquel Muir

Will Rogers Elementary, Santa Monica Unified School District

When BTES began I had been teaching 12 years in a district which had openly and forcefully adopted a policy of individualized instruction. Instructional materials, workshops, and teacher evaluations totally embraced the concept of individualized instruction. From the beginning of my teaching experience, creating individual learning opportunities in all subject areas was given positive reinforcement — even demanded. Small, smaller, smallest units of instruction were considered beautiful and productive. Heterogenous classrooms were established in all schools to ensure individualized instruction.

My interest in the Beginning Teacher Evaluation Study was initially stimulated by the findings of the first part of the study done by Educational Testing Service. The design and instrumentation of the study indicated that researchers were at last beginning to recognize the complexities of teaching and the value of studying normal operating classrooms. While the findings were simply hypotheses to be further explored, they offered stimulating challenges for teachers to think about in relation to their own classrooms. I was intrigued by the classroom practices different from mine that were reported to be related to higher achievement on standardized tests as well as on tests developed for the study. The findings on the use of materials and groupings for math and reading at the second and fifth grades appealed to my common sense, even though some were contrary to my practices. As a sixth grade teacher who had taught from grades two to six in a variety of combinations of grades or ages of pupils, I was comfortable in considering that fifth grade practices could have a logical extension for sixth grade practices. All of these findings, combined with my active interest in educational experimentation and change, led me to follow the study with increasing interest.

Research in Real Classrooms

The BTES design of using regular classrooms with a full complement of students for an extended period of time appealed to me also. Having conducted a year-long study with a regular classroom of 30 students several years ago, I was well aware of the difficulties and advantages of such a research design. The thread of common sense and the validation of some intuitive perceptions about teaching and learning which have been around for a long time began to emerge. Some concepts suggested teaching teachniques 180° from the highly accepted and endorsed individualized approach I was using.

As a classroom teacher I have become increasingly wary of quickly adopting new programs or even new instructional materials because they were "fresh, new and appealing." Furthermore, I have been reluctant to implement curriculum programs and their related materials in which I have had no opportunity for choice or evaluation. The research base for almost all such programs is limited or non-existent. On the other hand, in all fairness, my own instructional program was based on the district's adopted policy of individualization of instruction and their definition of the terms.

The issues raised by the BTES study offer stimulating challenges for teachers to explore, while suggesting a tool which can be a useful aid to help monitor student learning on a daily basis, if so desired. Instead of running counter to intuitive notions of good classroom practices and knowledge of children and their behaviors, the BTES research offers encouragement and support to stimulate creativity of a teacher and a refinement of the art of teaching. Who could turn down such an exciting prospect?

Soon after my introduction to BTES, I was appointed to the Commission for Teacher Preparation and Licensing in the State of California. This Commission was responsible for the development and administration of the study as well as the subcontracting for the services of Educational Testing Service and the Far West Laboratory for the actual research design and study. Because of my

expressed interest in BTES, I was appointed to the Research Committee directly involved with the study.

Researchers and Teachers — A Team

I had an excellent opportunity to observe and listen to the researchers in action. There were hours of debate between members of the research community on design, validity, and reliability. The number of recommended caveats appeared to make the research almost useless if all were adopted. It was obvious that the study needed the researchers and all their diverse views and expertise in design, but it became apparent also that even highly respected psychologists and research teams need teachers to help them understand some of the complexities and dynamics of a classroom in full operation.

About 1975 my interest in BTES and the emerging experiments became so intense I decided to ignore some of the early advice of the Research Advisory Board and "play" with some of the concepts first developed in the beginning of the study. This was in no way intended to be a research study, but simply a teacher taking some of the more practical findings and trying to determine if some of the 5th grade practices would transfer successfully to 6th grade.

For me, a powerful issue raised by the study was the indication that greater amounts of direct instructional time were correlated with increased student learning. As the results began to emerge with the concept of ALT (Academic Learning Time/Active Learning Time) the issue became more complex as it specified pupil behaviors and teacher skills. The final definitions of allocated time, success rate, time on task, and the family of teacher practices related to increased ALT were less clear and tidy as I began to try out some of the possible implications for teachers. I used diagnosis, prescription, presentation, monitoring, and feedback to individualize my instruction as I always had. How could I continue to use these concepts of teaching and give instruction to larger groups or even the whole class for math instruction? The concept of heterogenous groups vs. homogenous groups emerged. I found myself asking questions about and finding a challenge to my style of individualized instruction. In retrospect I was beginning to ask: "Is it possible that instruction in math and reading may be too individualized? Is it possible that there can be a blend of large group or even whole class instruction and individualized instruction? Are there elements of individualization that are distractors to time on task, even though theoretically educationally sound? Have we as educators been sold the concept of individualization too heavily, to the exclusion of other instructional patterns?" I saw tension and conflict, but also I saw intriguing possibilities.

The Context of the District

The climate for individual classroom experimentation in 1975-76 in my district was essentially neutral. The focus of administration was on impending collective bargaining, maintaining individualized instruction, writing behavioral objectives, and raising test scores through specified instructional programs. I was not able to generate more than mild interest in the concepts of BTES. Having been judged outstandingly competent as a classroom teacher by the Stull evaluation procedure, I felt free to experiment with BTES.

Basic questions emerged immediately. How could I increase direct instructional time for everyone in the class? Could I reorganize my math materials and acquire new techniques for teaching the class as a whole at the same time? Could I resolve the conflict between the issue of individualized instruction and greater amounts of time on task through whole class instruction? How long could whole class instruction effectively keep most students on task?

Philosophically, I did not have any trouble attempting to increase the direct instructional time at the expense of other activities such as games or unrelated center activities at the sixth grade. My observations over the years have suggested a strong correlation between academic competence, self concept, and a liking of school. In addition, my experience has been that students with stronger academic skills have tended to be more self-directed and often have helped to chart some of the learnings for the class. BTES suggested to me that if I could increase learning of students through more ALT, perhaps I could also have some influence on self-concept and attitudes toward school, as well as academic competence. In spite of all the caveats on ALT, I decided that it was terribly important for me to see if I could bring any of this about in my classroom. I simply couldn't wait for everyone to agree to disagree or agree to agree on the research and their final findings.

The Experiment Begins

I began my experimentation with some ideas emanating from the research in mid-winter 1976. The class was composed of 32 students — 20 boys and 12 girls. The school population was drawn from a middle to low income area with full integration of all minority groups. Achievement rankings of the school were reflected in my class and were below grade level at least six months to two years or more for both reading and math. The school had the Early Childhood Education project and the Title VII Bi-lingual project, but the upper grades (4-6) had no project, no aides, and no funds for supplementary services or materials.

Allocated time for math was 60-70 minutes per day with a success rate ranging from 40-80% on moderately difficult materials. I devoted a minimal amount of time to reviewing concepts except through cumulative teacher-made tests which I gave approximately every two weeks. There were five math groups based on concepts and skills plus three students whose skills were not suitable for any of the established groups. These three were on separate tracks with special materials appropriate for their levels—all low. My observations of the students' time on task without direct instruction was embarrassingly low when I focused my attention on that facet of my program. Transition time between groups was often slow and generally disrupted the entire class in making the moves between groups. However, the students worked well with me for group instruction and for about 10-15 minutes after their return to their own seats for the follow-up assignments. The class was not necessarily noisy but I observed that they were often not engaged in math or academic tasks. It was obvious the period was too long for some, yet how could I have small

groups and get to each group any faster for any kind of meaningful instruction?

This particular class had 20 boys who were very active. Several had physically aggresive behaviors. Discipline problems with several of these students were frequent when I was not working directly with their particular group. The class coverage of the math curriculum and the level of competence was sufficiently advanced by mid-winter that it appeared a good idea to undertake the new instructional pattern using a review of concepts.

I explained to the class about the research being conducted and why I wanted to try a new way to teach math. I suggested it might even be more fun for them. As a class, they agreed to try out the change and we discussed what would be the necessary behaviors for everyone if the plan was to work.

The first few days of the 45-minute teacher-directed instructional time with 10-15 minutes of independent follow-up were dramatically successful. Behavior problems disappeared. Everyone appeared to feel challenged, yet not overwhelmed. Everyone was working on materials and concepts which were within their capabilities for achieving high success or at least minimal success for those with few mastered concepts. The challenge was not ony for the correct response to a problem, but speed and accuracy to the best of each person's ability. I responded with above average amounts of positive reinforcement because I felt it was truly earned. An individual recognition system for effort and "being on task" began to evolve.

I found that, as a teacher, I was concerned with the presentation of the concepts and giving positive reinforcement for the responses I wanted from the students in terms of effort and accomplishment. But I also had to be highly sensitive to the physical and emotional behaviors of the class. At first I was only remotely conscious of ALT as a concept. Instead, I was busy with my sensitivities toward how many students were working. How long could I keep on with the concept and how many examples did we need to compute to make certain the concept was learned? How successfully was each student learning during the lesson? I have heard from other teachers that teaching the whole class is the style for the teacher who doesn't want to work too hard. I found the absolute opposite to be true. While it was exhilarating for both the class and for me to experience the feeling of everyone working independently, yet together, like an orchestra, it was tiring — no, exhausting.

Fresh Insights on Instruction

After about ten days of the new pattern, the children became aware that they too were covering more material and were working harder and longer than they had under the previous pattern. Some children in the slower groups who had been on individualized programs most of their lives worked harder than I had ever seen them work. The opportunity to do the same work as the whole class seemed to motivate them. While their speed and accuracy were not as high as most of the class, the idea of flying with the whole class seemed to keep them trying. I had expected some students to become bored with the practice material and the reviewing of concepts, but they appeared to respond to the challenge for speed and accuracy. Many expressed pleasure as they could see their increased speed and accuracy in computation. The issue of how much practice should be given before introducing a new concept rose to my level of consciousness.

Other children said that they like the new plan because it gave them a change and a chance to practice skills so that they *really* understood what they were trying to do. A willingness to suggest topics they would like to have re-taught became a familiar pattern. With encouragement from me, they helped to chart their needs and instructional tasks as well as indicating to me in avariety of ways that it was time to move right along.

The Conflict: Individualized vs. Large Group Instruction

On the other hand, lest the reader think that all was sweetness and light, there was a growing resentment within the ranks of the students that the amount of time they were being held on task for math was too much. The number who grumbled and resisted and verbalized was small, but they clearly became disruptive for the instructional period. They missed the opportunity of "messing around" when other groups were meeting. Some did not experience the success rate they wished to achieve (100% all the time with little or no effort). Some simply did not want to give up the small group instruction and the comfort of being able to ask for help with ony a few other students knowing what they did not know.

At the end of two weeks I would have said that the new plan of large group instruction was a success and was here to stay. The time on task of the students as a whole class had increased. The room was quiet and intense with the atmosphere of effort from each student — an environment teachers recognize and find rewarding. The environment was serious with even the "class clown" involved. The spirit of cooperation appeared contagious. It was as though the same behavior patterns present for small group instruction around a table existed for everyone in the classroom. With the large group instruction there was lack of physical movement between groups to the instructional table necessary for small group instruction, one less distraction for ALT.

The tensions between small group and large group instruction began to emerge as we moved into new concepts to be learned. Within the heterogeneous classroom the range in readiness for sequential concepts was great. New learnings were too hard for those without appropriate mastered skills. For those with advanced skills, the presentations necessary for large group instruction were sometimes too labored and long. Impatience with the pacing began to be exhibited. I discovered I changed my teaching style as well as materials and concepts in small group instruction. While large group instruction offered the advantage of monitored practice on varying levels and introduced concepts, small groups allowed the flexibility of pacing, style, and control of level of difficulty of concepts.

Experimentation with the whole group instructional pattern gave me some indication that I could move through concepts faster than I had and could give greater amounts of spaced practice for mastery of the concepts once the concept had been introduced with small groups. Removal of distractions such as groups

moving to and from centers or engaged in activities not directly related to assigned math work increased the total time on task for the class. My availability to move about the room to reinforce time on task behaviors and to provide immediate feedback appeared to increase ALT and served as a great motivator to students. A general procedure to lead the large group through sequential problem solving operations with assigned practice material at an appropriate lvel of difficulty appeared to be a successful teaching strategy. The rapidity of feedback, even for a small number of problems for each student, indicated the importance of this concept. Small group instruction did not lend itself to this same kind of immediate feedback except during the time that I was working with each group.

I experimented with different levels of instruction, different positive reinforcement techniques, alteration of the allocated time for math, style of presentation, diagnosis of each child's level and whatever variable appeared to intervene on the scene that seemed to change day by day. ALT swung from a dramatic high to a dramatic low about three weeks after the outset.

I was learning! An "either/or" attitude on my part — either individualized of total or large group instruction — was not necessary. There were advantages to both patterns. I began to seek a way to use the best strategies of each. Gradually as I altered the instructional advantages of each style pattern once again, ALT began to increase again.

The Compromise

It was apparent that I could not hold the entire class for the entire period of math every day. Because I had begun the new instructional pattern in mid-winter I decided after the 4th week to shift to a return of the small groups for two or three days per week and the total class instruction for the remainder of the week. The small groups were reorganized, and no one was on an individual program. I established a pattern of testing a bit different from the previous model. Every other week each group had a teacher-made test and every third week the entire class had the same teacher-made instrument which was a comprehensive review of all concepts taught previously both in small groups and whole-class. The pattern began to emerge as a happy compromise. Total class instructional periods were pleasant but intense, with high ALT. Smaller groups appeared to meet the individual needs and were helpful in covering concepts initially. ALT was high within the instructional period, but ALT for independent seatwork dropped at times without my monitoring time on task except from the instructional area.

Appropriate Materials

The greatest difficulty I faced was obtaining materials in sufficient quantity to be useful for the entire class at levels appropriate to obtain high success rates. If the tasks were too easy, the respect for the material did not seem to encourage adequate effort. Carelessness developed when the students viewed the material as too easy. Obviously, the opposite was also true, but for different reasons. If it were too hard, they simply either guessed wildly or made no attempt at all. I tried to avoid this mistake. The children finally accepted my frequent admonition that it was "O.K. to make a mistake, but not the same one over and over." A few mistakes were all right while learning was going on, but too many perfect papers apparently said to my students, "I'm doing this so well I don't need to work very hard at it. It is so easy I won't try." In my classroom the highest level of engagement was produced by medium level difficulty work, with occasional high difficulty work to whet their appetites to learn new things.

Attitudes toward math were far better for this class at the end of the year. The students made exceptional gains in math on the end of the year achievement test in May. Needless to say, they were delighted with themselves. Their behaviors and attitudes toward math had changed a great deal. I had changed the structure of the math instructional program and was confident and comfortable that the students were learning more. I thought consciously about ALT and how to increase it for math.

I was pleased to have experimented with the BTES concepts in math. ALT had not evolved as a named concept, but I had proved that I could increase direct instructional time for math. But I also knew I had to be ready to respond to class needs, interruptions of schedules, and other variables.

Same Time Next Year

My next class consisted of 28 students — 19 girls and 9 boys. Economic and ethnic balance of the class and school was shifting to more minorities and a rapid turn-over of students during the school year. This turn-over was a marked departure from the past for my classes. The girls in the class did not like math and said so at the beginning of the year. My having survived the year before with the new pattern of math instruction, made it far easier to use at the beginning of this year. This group did not have the opportunity to discuss whether they wanted to undertake a change. Standards for effort and behavior were cooperatively set with the class because I wanted to start this group with the new procedures as their accepted method. However, I definitely guided the results. ALT increased as the standards were met. With a greater amount of ALT, content and coverage were faster. By mid-winter an almost grudgingly stated opinion of the girls was that "math is really fun and I can do it better this year." While the procedures were easier to follow than the first year, I found that my own tasks of remaining sensitive and responsive to the pupil behaviors remained as critical for this class as for the previous one.

Trial and Error Crucial

I made some of the same mistakes again by having expectations that were too high for some of the class. What was fun one week was difficult and a chore the following week. Breaks in instruction due to my absence from the classroom to attend Commission meetings caused radical swings in ALT more severe than the previous year. Even so, math gains for this class on the post-test achievement tests were significantly increased over the gains of the previous year's class. Attitudes toward math continued to improve and were positive by June. Helping each other and cooperation between the children and with me was in much greater evidence with this group than the first class.

While I have no concrete evidence in terms of clocked ALT for individuals or the whole class, my own observations showed that I dramatically increased the ALT for math for this class. Comments from the principals and other teachers entering the room during math instruction were complimentary and frequently expressed amazement at how hard everyone was working. These comments seem to indicate that high ALT is the student behavior a teacher is expected to deliver. How or why students may have extended periods of ALT should be of prime concern to teachers and administrators.

The Reading Experiment

After several weeks of school I diagnosed the reading needs and abilities of these second year students. I decided to experiment again with this class in an effort to raise ALT for reading. You must understand that I have a short memory and had already forgotten the trauma of the previous year with math. Reading scores were below grade level for all the sixth grade classes. The reading program followed in my school and in most of the district schools is mandated by the district. It is a primary program which has been extended to all six grades for implementation. A reading specialist is assigned to each school to help maintain the program in all classrooms as well as to offer tutorial reading instruction to those pupils in the lowest quartile on standardized achievement tests.

Promising teaching practices reported by ETS in 1976 suggested that for fifth grade reading greater emphasis should be placed on comprehension than on basic decoding skills and word configuration. Sustained interaction between teacher and pupil around fewer instructional materials was suggested as another promising practice. Fifth grade reading instruction should be designed to require the use of more complex thinking processes in comprehension activities using fewer materials. Continuing to assume that it was reasonable to expect that sixth grade reading practices were closely related to fifth grade, I began to redesign reading instruction in my classroom.

The reading program in the district is considered highly individualized. It consists of a work configuation component (word recognition), phonics, comprehension and oral reading. Each student is assigned to a basal reader appropriate to reading level. Enrichment was to be horizontal, not vertical, with supplemental activities at stations. Station 1 was with the teacher, Station 2 was the independent follow up and Station 3 an opportunity for reinforcement through use of games. Almost all classrooms at the primary level had aides to assist the teachers. Upper grades had no additional support personnel. A wide variety of instructional materials was available and used in the classrooms in both primary and upper grades.

In an attempt to focus more instruction on reading comprehension activities, I eliminated Station 3 — the games and A-V activities. Heterogeneous ability groups were formed and met with me at the instructional center for at least 20 minutes each day. All other students remained at their own seats with independent assignments. As in math, less physical movement within the room resulted in less time used in transitions from Station to Station. In addition, games and A-V activities had been a consistent distractor for students at other stations. For upper grades, this Station 3 concept was viewed by most teachers as a deterrent to reading instruction rather than a facilitator.

I discontinued the configuration compnent — the flash card technique for recognition of words. Time for phonics instruction using nonsense words for all students was eliminated unless it was obvious that the student had missed all the previous primary and middle grade phonics instruction and had no word attack skills.

I focused almost all reading instruction on comprehension activities. Again looking to the research as a base, I established a pattern of instruction which made it possible for me to prescribe, monitor, and interact with each student on a daily basis. I established a contract system for independent reading activities. A pattern of revolving comprehension groups evolved as I obtained instructional materials with a range of difficulty. All programs were monitored by teachers, and the materials provided immediate feedback for the students in addition to the opportunity to interact with the students concerning the reading concepts.

This instructional pattern was considerably different from the district's reading program. The students eagerly adopted the new plan; apparently they were tired of the previous program, since it had been their sole pattern of reading instruction since the first grade. It was necessary to establish cooperative standards of behavior for the reading period, but as we openly discussed transition times and behaviors, the transition times between groups and subjects dropped to 1-2 minutes. Monitoring ALT on the instructional materials became much easier as the mood of the class changed. I knew the kind of ALT I was seeking. Once the children experienced the feeling of success, they also appeared eager to capture it again for themselves.

Student Cooperation Critical

This class began to talk about their need for superior classroom cooperation and behaviors that would allow each person to work to his or her fullest ability. They clearly wanted an environment that was quiet yet relaxed enough to move about to get needed materials and/or help. As the year progressed the self-direction of many of the students became more apparent, whether they were working directly with me or in their individual areas.

I established study carrels for each pair of students, using cardboard as dividers or walls. I provided bookends for each student to house any overflow of books that would not fit into the desk. The students papered the dividers in wallpaper of their choice; some brought desk equipment from home. The environment was business-like yet pleasant, personal, and relaxed. Each person had a place of his/her own for study, relatively free from typical classroom distractions.

Students, Test-Scores and Feedback

I had parent-student-teacher conferences to go over quantity and quality of daily work of students. I included the child in the conference as an equal partner in reviewing the work. Each was interested in learning how they did on the standardized achievement tests. It was the first time that many had ever known how they had performed on such tests. I discussed the concept of ALT without using the name with the parents and the

children. Reasons for the room environment and the group activities appeared to take on new meaning for all concerned.

My experience with ALT for both reading and math for this class was positive. Though I had no aides or assistants to help with the implementation of the program, this class had substantially increased the amount of Academic Learning Time within the allocated time for reading and math. Further, as a group, they felt good about themselves and school and looked forward to entering Junior High School. Many have returned to share their successes with me during the current year.

After I had scored their annual achievement tests in late May, I again conferred with each student. Each student was given his/her test results and the amount of gains or losses.

An interesting spin-off of this activity occurred which had a direct effect on the ALT for both reading and math. Because most students were very pleased with their improvement on the tests, they said they were pleased to have learned. They also said they were tired of working so hard for so long.

It was time for a change of pace. I had a choice to make because ALT for both reading and math had become lower after the feedback than any time during the year. Typical reinforcement activities no longer produced results. It was apparent that I could agree with them and respond to their concerns with learning activities different from the pattern we had followed throughout the year, or I could try to insist that we follow the regular routine to the end of school and take the chance that ALT would skid out the door.

ALT as a Tool

I had learned another interesting variable for maintaining ALT. Giving too much feedback on the student performance of traditional post-tests — CTBS in my district — causes students either to become discouraged and full of despair or to consider themselves as having achieved more than sufficient learning for the year. They graduate themselves! When this occurs, ALT plummets if the same instructional program continues. Many resisted more comprehension assignments in reading. Independent free-ranging library reading alone produced high level ALT the last 4 weeks of school. Perhaps this is not all bad. I responded with a variety of different activities. Had I chosen to assess the ALT for these activities, it would have been high. The power of ALT as a tool to measure learning whether externally measured or not became more and more apparent. If it is used to help evaluate and monitor academic subjects, the term ALT is probably appropriate. If, on the other hand, it us used to help evaluate activities in the affective domain it could be equally valuable under the title of Active Learning Time. I think and use the term interchangeably.

Implications of ALT

1. An Unanswered Question

The response of the second class to increased ALT led me to another unsolved question which research has not yet addressed. Is it possible to increase ALT to a level that it could be a negative influence toward school attitudes? By being perceptive to the changes and behaviors and moods of the class, I was able to see that my instructional program needed to be changed for the last month of the school year. I decided that the possibility of too much ALT was another variable that needs serious research.

2. ALT an Unshackling Idea

I view ALT and the BTES as a tool that suggests practices to be used by teachers in an individual manner to further the art of teaching elementary children. In no way do I view the study or findings as a prescription of what a teacher ought to be doing in a classroom. If an entire faculty could view the issues raised by the study and application of ALT, and agree to experiment within their own classrooms using their own styles, the experience would be productive for education.

The implications of ALT indicate some necessary self-evaluations which must be made by teachers. Hard questions must be honestly answered if success with ALT is to be experienced. Can the teacher accurately diagnose individual student needs and level of skills? Is the skill of prescribing learning activities sufficient to ensure an orderly presentation of skills or challenges to the students? Is it possible to monitor closely the learning of the students on a daily basis? What kinds of changes in presentation would be necessary if the concepts were to be taught to a large rather than a small group? How much time is available to interact with individual students on a daily basis? How much feedback and how fast can it be supplied to the students?

As an individual teacher responds to such questions and evaluates the program within his/her own classroom, it should become apparent that the basic teaching skills or behaviors as suggested by BTES are present or absent. Only an individual teacher can honestly assess his/her own basic knowledge. The obvious implication of these issues would be to obtain help to develop the skills if they are lacking, use them if they are present (but not being consciously applied within the classroom) or refine them further if that is appropriate. Certainly the notion of evaluation of teachers on the basis of classroom ALT observed on visitations by principals should be vigorously resisted.

3. Time — An Unresolved Issue

Later findings from BTES and ALT converge around the variable of allocated time and level of difficulty of materials presented to students. There is a great range in amounts of allocated time for both reading and math. Implicit in the examination of the amount of allocated time should be the amount of time the students are on task during allocated time. The issue appears to be not necessarily how allocated time can be increased. In spite of the current "Back to Basics" movement, we must remember that increasing allocated time in order to increase student learning may not be the central issue. There may be a maximum amount of allocated time desirable for a class. To go beyond this limit may be a negative indicator rather than a positive one for ALT. Too many variables interfere with a finite statement of time allocation. BTES does not speak to this issue.

4. Student Success — An Unresolved Issue

The proper level of difficulty of materials, with the resulting degree of success experienced by the student

remains an open-ended issue. Of all the variables within the study, this was the most difficult for me to manage over an extended period of time. While the research was conducted on the second and fifth grade levels, I attempted to extrapolate findings to students at the sixth grade level. While I was unable to replicate the same findings within my class as suggested by the BTES, the implication that appears to be powerful is that the greater amount of practice is appropriate for all students. How much practice and at what level of difficulty still must be determined by the individual classroom teacher working with the unique group called a class. Related to this issue is the question of the appropriateness of using textbooks as the major structuring of the curriculum because many books may not be supplying adequate amounts of practice materials to ensure consolidated learning by students.

The Study indicates that ALT may be a tool to help observe concurrent learning rather than relying on the untimely results of standardized tests. The power of this implication is obvious to any teacher. The opportunity for immediate feedback and manipulation of variables by the teacher to meet daily challenges to obtain high ALT stimulates the development and use of all of the professional skills and sensitivities of teachers in classrooms. While the study was limited to academic skills of reading and math, my observations within my own classroom indicate that its usefulness is not limited, but would be equally effective in supplying information on student engagement in affective as well as cognitive tasks. Perhaps, in fact, this may be the only kind of measurable learning that can be observed in many self-directed affective learnings. Seldom do standardized tests given in public schools tap such learnings.

5. BTES Makes Common Sense

Another implication of the BTES research is the support of the common sense and almost intuitive teacher behavior and environmental variables which comprise the art of teaching. With each increasing bit of knowledge about learning, classroom teachers have a rationale for defending good current practices and rejecting suggested programs or materials not based on research. Teachers should consider their style an individual approach to maintaining or increasing ALT as a basic teacher academic freedom. I leave the implications for staff development of the basic teacher skills involved in developing ALT to the teacher educators, as well as the development of skills for pre-service teachers. The implications for strong development of sensitivities to behaviors and silent language of students as well as a strong base of cognitive content are apparent, but in addition the need of a wide repetoire of interventions and reinforcement techniques are necessary for any teacher to move toward greater amounts of ALT.

In addition, if classroom teachers would have evaluated new programs based on personal experiences with ALT, perhaps some of the presenty used programs and materials might not have been adopted.

The usefulness of the teacher beh..vior variables within the study such as diagnosis, prescription, presentation, feedback as well as allocated time and range of level of difficulty are fine criteria for evaluating suggested new programs.

6. Our Classrooms

Finally, the most general and yet most powerful implication for the issue of ALT rests with teachers re-taking control of their own classrooms in an independent, thoughtful, and responsible manner. Using the rationale and application of research findings, self-study, and self-improvement of skills, teachers will be able to resist fads, practices and programs which seem to run in cycles, often counter to common sense and intuitive teaching experiments and use instead concepts presented in research such as BTES. Teachers do need help in learning about such research and the findings.

I would hope that teachers would not wait to be facilitated into trying out the issues raised in BTES. I would further hope that administrators and central office personnel would refrain from checking ALT in classrooms with an idea of evaluation.

7. Descriptive Not Prescriptive

ALT is a powerful tool, not a prescription for how and when to use the tool. ALT as a concept is dynamic and ever changing in each classroom because it focuses on ever changing and growing human beings. A teacher must make constant adjustments in practices within the year as well as from year to year. Teachers do make a difference through their sensitivities and perceptions of their students as well as their academic knowledge. Only a teacher, a growing human being, can use tools such as ALT and utilize the skills mentioned in the study to synthesize a program and environment which is flexible, personalized, and appropriate for both teacher and students.

In closing, I suggest that teachers "play with" the issues and concepts presented in BTES. Experiment with the ideas and the variables that appear relevant for your grade level and classroom. Primary and upper elementary classrooms are very different. Measure your ALT and transition time. Challenge yourself to increase ALT and decrease transition time regardless of your basic educational philosophy. Interesting changes may occur for you.

A PRINCIPAL IMPLEMENTS BTES

Pamala Noli
Principal, Howard Elementary School, Madera Unified School District

There are two kinds of fools: Those who say, "This is new and therefore better" and those who say, "This is old and therefore good."

—William Ralph Inge

From the beginning of my involvement with the Beginning Teacher Evaluation Study, I was attracted to the model hypothesized because it reflected some old, but intuitively valid notions about teaching and learning. They were being viewed, however, in a new and exciting context.

I had been appointed to the Research Advisory Board as a representative of mathematics educators working at the district level. Eighteen months later my job changed from curriculum consultant and ECE coordinator to the principalship of two K-8 schools in a rural community. BTES seemed the perfect vehicle by which to reach three of my major goals: To improve student achievement, to set up a staff development program that fits the value system of the faculties, and to satisfy the district's need for higher test scores.

During the summer between my appointment as a principal and the fall when I assumed the position, I set about conceptualizing a staff development plan. I was plagued with a number of doubts and fears. Would these two staffs like and respect me if I pushed too hard too fast? How would I deal with teachers who rejected any attempts at change? Wouldn't it be better to wait a year until I had (hopefully) established my credibility? Would I alienate the other principals if I was too "gung ho" and was able to raise test scores to a noticeable degree? Could I cope will all the new managerial tasts before me and do this too? Could this effort hurt the school climate I hoped to improve? Did I have the necessary leadership skills? When I realized that these doubts were getting the upper hand, I tried to reason with myself on the other side. Hadn't I successfully taught at a number of grade levels for six years and continued to teach in classrooms regularly in every job I had held since? Hadn't I had lots of leadership roles at the school and district levels over the past eight years? Hadn't I spoken all over the State since 1970 on such topics as individualized instruction, mathematics education improvement and humanistic competencies and acted as a consultant to a number of other school districts? This last question brought my fears into clear focus. Except for my experiences as a classroom teacher, resource teacher and curriculum writer, much of what I had done in my career had been of the "blow in, blow off and blow out" nature. Now I would have to live with the results.

I remembered a quote by Eleanor Roosevelt in which she said, "I believe that anyone can conquer fear by doing the things he fears to do, provided he keeps doing them until he gets a record of successful experiences behind him." Clearly, I had to begin lest I never do so. I dismissed the warnings for caution offered by the researchers on the Advisory Board who repeatedly pointed out that the hypothesis had not yet been empirically validated, and I plunged ahead.

The Question

By the conclusion of the first part of the study, a hypothesis had been generated that students who accumulate more active learning time in a particular achievement area would attain higher achievement scores in that area. The model formulated from this hypothesis stated that teaching processes, such as diagnosis, prescription, feedback, structuring, and monitoring, would have a direct influence on active learning time. The question that I addressed was simply how to introduce the staff to this concept so that they, in turn, would work to increase the active learning time (ALT) of students in reading and mathematics in our elementary schools. Time itself was not seen as the end, but rather a means to the end. As one increases ALT there is, as a result, more content covered. If more content is not covered, increasing time will have little effect on achievement. With this in mind, all activities that took place linked time with content coverage.

Fall, 1976

The first series of inservice activities were aimed at "unfreezing" (Lewin, 1951). I prepared myself by reading all the available materials to which I had access, including works by Berliner (1976-1978), Rosenshine (1971, 1976, 1978), and MacDonald (1976).

Knowing that teachers are not too receptive to new ideas when they are presented at 3:30 in the afternoon, we went to the Board early in September to ask for a weekly reduced day for staff development. The teachers agreed to add 15 minutes of instructional time each morning (school was to start at 8:30 rather than 8:45) and students would be dismissed an hour and 15 minutes early on Mondays. Allocated instructional time was not reduced.

I summarized the major ideas and shared them with the staff once a week, 15 minutes per staff meeting. This continued throughout the semester with discussions centering on the theoretical and philosophical implications. We clarified our own values and notions about how children learn and why we do what we do in the classroom. When it was clear that the central construct of the BTES hypothesis was in harmony with the beliefs of the staff, we moved to our second phase.

Spring, 1977

Consciousness raising discussions continued, but the focus shifted from the general to the specific. Every week I observed in at least six classrooms. My purpose was to gather observational data on randomly selected students during reading or mathematics instruction. I explained the methodology to the staff beforehand so that everyone understood the procedures that would be employed and how the data collected would be used. With two stop watches, I timed the amount of on-task behavior exhibited by one student over a 10 minute time duration. One stop watch ran continuously. The other was on when the child was engaged in active learning and off when (s)he became disengaged (day dreaming, sharpening pencil, talking to a friend, changing groups, and so on). Immediately after the observation I calculated the percent of time the student was on-task and described in writing the environment and sequence of events encompassed in the time period.

At the end of the teaching day, I had a conference with the individual teacher to share with him the information that had been gathered and the specifics of what had transpired with the observed child. It soon became clear that some teachers were much more open to this activity than others, and some were downright threatened. I decided, for the present, to limit my classroom observations to those teachers who were receptive.

During regular staff meetings, I shared my summaries of that week's observational data, being careful not to name specific teachers or children. A predictable reaction on the part of the staff began to emerge. They were quite aware, by this time, that the ALT notion was important to me. Because I was their immediate supervisor, new to the staff, and the person who wrote their evaluations, a certain amount of anxiety set in. Although no open hostility was shown, such quotes as the following were occasionally overheard: "How was your alt today?" (Teacher to teacher); "Our next outside consultant is sure to be John Alt," (Teacher to teachers); and "If your alt is off when Mrs. Noli comes in, you guys have had it," (Teacher to class). One teacher told me, just recently, that they were all very apprehensive and insecure because an unknown "hotshot" from the district office was their new principal.

Sensing their fears and recognizing that some of my own were about to materialize, I decided to down play the whole effect and work only with the teachers who expressed interest in continuing. I hoped that after the teachers had received their first written evaluations from me and had had the recuperative time-out provided by the summer, our trust level would be such that we could proceed again. My only reference to BTES during the last quarter of school was to share with them what happened at BTES Advisory Board meetings, in the context that they had a right to know what I was about when I ran off to those two-day affairs. I hoped that the sharing of my enthusiasm for what was happening would be contagious and not posing a threat.

Fall, 1977

As anticipated, the staff returned eager to begin the new year. I openly discussed my fears of the previous spring (I was obviously more secure now) and asked them if they wanted to continue to develop the BTES constructs. Consensus was reached in the affirmative with the agreement that ALT data collection would occur only in the classrooms of teachers who volunteered. Four out of nine did so. Staff meetings that followed included a five minute brainstorming session wherein ideas were generated relative to one particular facet of the time model such as decreasing transition times, improving monitoring techniques, using aides and parent volunteers to increase ALT, helping students learn to cope with the state of being "stuck," and using multiple response techniques. The brainstorming was followed by small grade level cluster discussion groups to identify and elaborate the ideas which seemed utilitarian to each specific classroom. Much discussion focused on the problems of individualized instruction and learning center activities in light of this new framework.

Spring, 1978

By February, many excellent ideas had surfaced and some were being implemented. I again began to gather student observational data in the same manner I had the year before. The anxiety level of the teachers further decreased because they had all received two evaluations from me and were secure in the knowledge that they were not going to be judged on paper relative to what they were doing with ALT. Some jokes continued, but most were good natured teasing about whether or not they would survive my doctoral program if I choose to pursue ALT as a dissertation focus. One more teacher volunteered for classroom data collection.

In late February, an experimental intervention study was published which Berliner (1978) and members of his research team had designed and carried out. Although all three researchers were excellent educational psychologists and research methodologists, their elementary school experience was limited to their classroom observations.

Each week, during inservice meetings, I shared with the staff, parts of the four interventions which had been carried out to improve ALT. Together we analyzed and critiqued each case study for better strategies that could have been employed, given that environment. By this time, the teachers felt that they had a good deal of expertise in the area and were satisfied that they could have done a better intervention than had the "professionals" with a national reputation. At the same time, I was sharing with five of them their own ALT observational data which demonstrated considerable improvement over the previous year. This improvement was also shared with the rest of the staff. Feelings were much more positive.

Fall, 1978

Although the final phase of the research had been completed the previous spring, I decided to withhold the results until the fall when the teachers would return reviewed, refreshed, and responsive. At an early staff meeting I shared the final results in summary form. Some expressed relief that the theory we had pursued for two years had been empirically validated, and I certainly concurred. Others said that to them the final report was immaterial. They *knew* from their own experience that increased ALT made a difference in student achievement and that if the research hadn't confirmed it, the fault was in the methodology. As proof, they

offered the previous spring's CTBS scores, which were the highest ever achieved by the students of the school. I cautioned them not to jump to such conclusions based on test results, since we hadn't controlled for other variables (the methodologists on the Research Advisory Board had, by this time, educated me relative to the complexity and inadequacy of most social research design), but I was secretly pleased that they perceived a correlation.

One of the findings that we had not anticipated was that high success rate, rather than medium success rate, would enhance achievement. Our working definition of ALT had been the amount of time students were engaged with materials of intermediate level of difficulty. Debate ensued over this point because must emphasis had been placed on individual diagnosis and prescription which resulted in teaching children at a level where errors were to be expected. Were we now to assume that all materials were to be at such a low level that every child would get 100% at every turn? The conclusion was reached that the direct instruction level must be one step beyond the point of previous mastery and that errors at this level, were to be expected; that teaching should continue on the objective until low error rate was predictable; that the practice with the learning, when it becomes easy, was important for evaluation, reinforcement and transference. It was deemed that the latter could best be done through homework, thus not retarding the content coverage potential.

The above is offered only as an example of the type of dialogue that can occur, not as the correct interpretation of the implication of the high success rate finding. We have reached our conclusion, however, and action on the part of teachers is occurring, particularly in the areas of homework and parent education.

In retrospect, I can see that my original fears were exaggerated, but, none-the-less, useful. They made me more aware of my actions and sensitive to the concerns of the others with whom I worked.

The respect and "liking" had to be earned over time, but would never have been achieved had I abdicated to maintaining the status quo. "Handling" teachers who resisted change was difficult until I realized that we all learn, change, and grow at different rates via various modalities. No amount of pushing, power, or "handling" will make a difference until time is given to work with teachers individually, within their own value system.

My fear about the other principals was warranted, but for other reasons. They were concerned that I would receive more favors from the district office because of my previous six years there. It took almost two years for those anxieties to diffuse so that I could become an accepted colleague. They didn't even notice the test score shift.

I found that under the direction of a super-secretary I was able to cope with the building-type management responsbilities, and still have time for the more important functions of the principalship, including staff development and process evaluation. Time management continues to be the key.

SOME SPECIFIC CHANGES THAT OCCURRED

The previous sections of this paper review our chronological involvement. I would now like to move to some specific findings of the study and share an outline of what we did with regard to each. With the exception of the changes that were organizational school wide, each teacher had the option of accepting or rejecting the implementation activities. No single teacher adopted all of what follows, but neither did any one teacher reject them totally. It is important to keep in mind that all actions came from the staff. My role was, and continues to be, one of facilitator.

1. **Students who had a longer period of time available for instruction in a particular content area also learned more in those content areas.**[1]
   - A. The day was extended by 15 minutes.
   - B. Two morning 10 minute recesses were combined into one 20 minute recess, thus reducing transition times.
   - C. Primary teachers initiated extended day schedules for small groups of children. Since room was available on the 3:30 bus, transportation was no problem.
   - D. A project was written and accepted to employ after school and home tutors utilizing funds from CETA[2].
   - E. Transition times getting in from recess and lunch were reduced. Movements from group to group or station to station were streamlined.

2. **Students who attend to their instructional tasks more often learned more than students who attend to their instructional tasks relatively little.**
   - A. Classroom disruptions were cut to a minimum.
     1) Public Address announcements are limited to the first or last 10 minutes of the day.
     2) Custodians, resource personnel, secretaries, or the principal only enter rooms at normal transition times unless there is an emergency.
     3) Students leaving class for music, speech, E.H., and so on, must keep their own schedule and leave quietly. Exit and reentry times are scheduled, as often as possible, with natural transition times.
     4) Early in the year, simulations and role playing activities were carried out so that children would not be drawn off task by a classroom disruption. As an example, two children simulate an argument. The class is told that it is O.K. to check-out what is happening (they

[1]All seven of these statements are taken from *Teaching Behaviors, Academic Learning Time and Student Achievement*, Technical Report V-1, BTES, Draft Version, Fisher. Filby, Marliave, Cihen, Dishaw, Moore, and Berliner, April, 1978.

[2]Comprehensive Employment Training Act.

would regardless), but are expected to get back to work immediately, even though the argument may continue. The scene is played out and the children practice the desired behaviors.

B. On-task behavior is rewarded in various ways.

C. A sustained silent reading program is carried on every day from 12:40 to 1:00. Everyone in the school (students, teachers, aides, secretaries, custodians, and parents) reads something of their choice in the classrooms. The phone is off the hook, the office is locked, and a sign informs visitors that they will be helped at 1:00, but in the meantime they are to take a book from the stack outside the office door and read.

3. **Students learn more when their teachers are skilled at recognizing the specific strengths and weaknesses of individual students and assign tasks that are appropriate to the needs and level of readiness of individual students.**

A. Inservice education was provided on diagnosis and prescription.

B. Learning modalities will be explored this year.

4. **Student engagement rates are higher when students are involved in more academic interaction with the instructor. Engagement rates are higher in a group setting than during independent seat work. Engagement rates in the seat work are higher when students receive more monitoring or help from an instructor.**

A. Paid classroom aides are trained and used as instructors. Their 3-½ day is spent totally in this role under the direction of the teacher. Clerical tasks, including record keeping, paper corrections and the like, are done by two eight hour aides who spend their afternoons so engaged.

B. Parent volunteers and cross-age tutors work predominantly as monitors, helping the students assigned to independent seat work or centers.

C. Multiple response techniques are utilized regularly when working with groups, especially at the recall level. One staff development afternoon was spent making individual 12" x 12" chalkboards for each child. Students bring fuzzy socks which serve as their erasers. When the teacher asks a question, every child responds on his chalk board. The result is a much higher engagement rate since every student participates everytime. The teacher is better able to diagnose the group's learning and pace the lesson accordingly.

D. "Independent" learning centers are monitored by cross-age tutors or parents unless the station has an audio-visual focus of interest such as a tape or filmstrip.

E. Individualized self-paced instruction is done only with small, monitored groups. The use of self-directed kits and programs such as SRA, SWIRL, I.P.I. or Barnell-Loft, are never done with the whole class because monitoring and immediate feedback has been found to be extremely difficult when the adult/student ratio exceeds 1:10.

5. **Student engagement rates are higher in classes where there is a clear focus on academic achievement as an important goal of schooling.**

A. An academic "down to business" atmosphere sets the tone in most classrooms during reading, mathematics, and language instruction. This does not preclude students working together on cooperative projects in center, for instance, nor does it mean that motivation and excitement are stifled. Academic achievement is expected and students are held accountable.

B. Teachers structure activities so that students understand what is to be learned during a given period and what the behavioral expectations are.

C. Afternoon period following sustained silent reading vary in their forms but include activity oriented subjects as social science, health, science, and P.E.; creative activities such as art, music and drama; and affective activities such as magic circle, centering, and values clarification.

6. **Students learn more when they receive more frequent feedback about whether their responses on academic tasks are right or wrong.**

A. Multiple response activities allow teachers to give feedback to a number of students on each question.

B. Small groups with a monitor are receiving much more individual feedback than is possible with other grouping arrangements.

C. Self-correction of independent seat work is encouraged, but papers are spot checked by an adult so that the teacher can respond with direct instruction to any child who is experiencing difficulties.

7. **Students learn more when the classroom learning environment emphasizes cooperation and student responsibility for academic tasks.**

A. Strategies to promote cooperation and responsibility will be one of our focuses in staff development this year. Although we have not discussed this as a group, I have observed many unique unique approaches in the classrooms and feel confident that a little brainstorming and a lot of sharing will help to foster this goal.

Concluding Thoughts

I have referred to the ideas generated by BTES as a framework, and therein lies its beauty and potential for staff development. If this framework fits securely and comfortably on the foundation of beliefs, values, and general philosophy held by the staff, work can begin on the superstructure. As the building takes form, uniqueness will reflect the visions and character of its builders, the teachers. Unlike other edifices, however, this one will never be finished.

REFERENCES

Berliner, D., Fisher, C.W., Filby, N., and Marliave, R. *Proposal for Phase III of Beginning Teacher Evaluation Study*. San Francisco: Far West Laboratory, 1976.

Berliner, D., Fisher, C. W., Filby, N., and Marliave, R. *Executive Summary of Beginning Teacher Evaluation Study*. San Francisco: Far West Laboratory, 1978.

Berliner, D. C., and Rosenshine, B. "The Acquisition of Knowledge in the Classroom." *Beginning Teacher Evaluation Study*. Technical Report Series. San Francisco: Far West Laboratory, 1976.

Berliner, D., Filby, N., Marliave, R., and Weir, C. "An Intervention in Classrooms Using the Beginning Teacher Evaluation Study Model of Instruction." *Beginning Teacher Evaluation Study*. Technical Report VI-1. San Francisco: Far West Laboratory, 1978.

Lewin, K. *Field Theory in Social Sciences*. New York: Harper and Brothers, 1951.

McDonald, F. *Beginning Teacher Evaluation Study*, Phase II. Princeton, New Jersey: Educational Testing Service, 1976.

Rogers, E. *Diffusion of Innovations*. New York: The Free Press of Glencoe, 1962.

Rosenshine, B. *Teaching Behaviors and Student Achievement*. London: National Foundation for Educational Research, 1971.

Rosenshine, B. "Classroom Instruction." In N. L. Gage (ed.), *The Psychology of Teaching Methods*. Seventy-fifth yearbook of the National Socity for the Study of Education. Chicago: University of Chicago Press, 1976.

Rosenshine, B. "Instruction Principles in Direct Instruction." Paper presented to the annual meeting of the AERA, Toronto, 1978.

THE GOALS OF THE BTES

The primary goal of the Beginning-Teacher Evaluation Study is to determine which skills and qualities are necessary for the teacher to impart learning effectively in the classroom. In addition, the Study offers a series of subsidiary goals of value to the profession, including:

- Fostering research on teacher effectiveness, through the development of research designs, models, methodologies, and instruments for future studies.

- Collecting data from natural classroom settings for analytic study to provide further understanding of the processes of classroom teaching and teacher education.

- Facilitating and enhancing communication between educational researchers and practitioners, particularly those engaged in training teachers.

- Assisting in the determination of what teacher skills and characteristics can and should be developed through programs of teacher education at both the pre- and in-service levels.

- Aiding in studying the processes of institutional and programmatic change as research results become available.

- Contrasting current accepted beliefs about teacher education and evaluation with those implied by the study.

- Providing a model of effective cooperation between federal, state, and local governmental agencies, and both public and private institutions of higher education, in order to promote inquiry into the processes of educational research and practice.